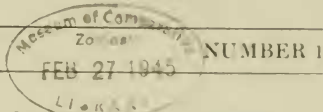


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A New Celebes Freshwater Snail (*Hydrobiinae*)¹

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Genus *Indopyrgus* Thiele 1928

Indopyrgus Thiele 1928, Zoologische Jahrbücher 55, p. 373, 378; Genotype, *Indopyrgus nevilli* Thiele (Andaman Islands).

Indopyrgus was originally described as a subgenus of the Australian genus *Potamopyrgus*. It is raised at this time to generic standing. All members of this genus are small, less than 3 mm. in length; shell thin, ovate, smooth, with about 3 or 4 whorls, the last being large. Aperture sub-ovate, the lip slightly thickened. Umbilicus narrow and slit-like. Operculum, thin, corneous, paucispiral. Radula characters are distinct from *Potamopyrgus*. Rachidian tooth possesses two long thin basal wings and has a denticle count of $\frac{5-1-5}{3-3}$. The lateral tooth oblique, with a strong

central elbow. The denticle count varies from 4-1-6 (*nevilli*) to 3-1-5 (*bonnei*). *Indopyrgus* is placed in the subfamily *Hydrobiinae*. Other species placed in this genus are *I. moussoni* Issel 1874 and *I. borneensis* Issel 1874, both from Bintulu, Sarawak, Borneo.

Though this genus has never been implicated as an intermediate host of the human blood flukes, there is a possibility that it may be found to be a carrier of schistosome cercariae, as in the case of its relatives, *Schistosomophora* and *Katayama*. Bonne and Sandground in their work on

¹ The opinions expressed in this article are those of the author and are not to be construed as official or reflecting the views of the Navy Department, or of the Naval Service at large.

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First figure, Holotype of *Indopyrgus bonnei*, new species. Remaining figures, Paratypes, all 4x from Lake Poso, Celebes.

1



FIGURE 1, Radula of *Indopyrgus bonnei*, new species. FIGURE 2, Operculum of *Indopyrgus bonnei*, new species. (Greatly enlarged)

Schistosoma japonicum in Lake Lindoe, Celebes, sent a large collection of freshwater shells to Dr. Joseph Bequaert at the Museum of Comparative Zoölogy, among which a new species of *Indopyrgus* was the nearest relative to the proven snail host, *Schistosomophora*, of the Philippines.

Indopyrgus bonnei, new species

Plate 1, figs. 1-6, Plate 2, figs. 1 and 2.

Description. Shell small, about 3 mm. in length elongate-ovate, thin, semi-transparent, light chestnut brown, with the edge of the peristome marked by a line of deep chestnut brown. First half nuclear whorl indented, remaining whorls inflated, rounded, marked by slightly retractively curved lines of growth. These lines are very minute and spaced unevenly. Spiral sculpture absent. Suture strongly constricted; periphery inflated and well rounded. Base short, narrowly umbilicated. Aperture large, broadly ovate, with the peristome slightly expanded and slightly reflected. The operculum is thin, corneous, translucent horn-colored, approximately one third the length of the shell, and with the nucleus strongly excentric. It is paucispiral with about two and a half turns. (See Plate 2, fig. 2) Tentacles of animal simple, tapering to a point; eyes simple and situated near the base of the outer side of each tentacle. Radula formula is: rachidian $\frac{5-1-5}{3-3}$; lateral 3-1-5; inner marginal 16; outer marginal 9. (See Plate 2, fig. 1).

length	width	no. of whorls	
2.9	1.5 mm.	4.2	Lake Poso, Central Celebes.
2.8	1.6	4.3	Holotype M.C.Z. no. 147474.
2.6	1.6	4.2	Lake Poso, Central Celebes.
2.5	1.7	3.9	Paratypes M.C.Z. no. 147475.
2.5	1.6	4.5	
2.3	1.5	4.2	
2.3	1.5	3.8	
2.2	1.5	3.6	
2.2	1.4	3.9	
2.0	1.5	4.1	
1.9	1.3	3.5	

2.3	1.3	4.3	Lake Lindoe, Celebes.
2.2	1.3	4.5	Paratypes M.C.Z. no. 147476.
2.2	1.3	4.2	
2.2	1.2	4.1	
2.1	1.3	3.9	
2.1	1.2	4.1	
2.0	1.2	4.1	
2.0	1.2	4.0	
1.9	1.1	4.0	
1.8	1.1	4.0	

Types. Holotype, Museum of Comparative Zoölogy no. 147474 Lake Poso, Central Celebes. Charles Bonne, legit. 1941. Paratypes M.C.Z. no. 147475 from the same locality and M.C.Z. no. 147476 Lake Lindoe, Celebes. Charles Bonne, legit. 1941.

Remarks. This tiny freshwater shell is common along the shores in certain parts of Lake Poso and Lake Lindoe, in the Celebes. It should be suspected as a possible carrier of schistosome cercariae. The shells from Lake Poso are more mature and hence a bit larger than the specimens from Lake Lindoe. In nature the shells are partially covered by a thin encrusting of lake slime. This species differs from *nevilli* Thiele in having a more extended spire, whorls of the spire more convex and a color line of deep chestnut brown around the lip. *Indopyrgus borneensis* Issel is considerably more squat than any of the other species and differs, like *I. moussoni* Issel, from *bonnei* and *nevilli* in lacking the continuation of the lip across the parietal wall.

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